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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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770 775 780

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785 790 795 800

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Thr Gly Thr Ala Cys Thr Cys Thr Cys Ala Cys Cys Thr Gly Ala Ala  
980 985 990

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Cys Cys Thr Gly Thr Gly Cys Cys Cys Cys Gly Cys Cys Thr Cys  
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## EX05-004patentin.txt

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## EX05-004patentin.txt

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Gly Ala Gly Cys Thr Ala Gly 1520 Thr Gly Ala Ala Gly Gly Cys Ala 1530

## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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## EX05-004patentin.txt

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2930 2935 2940

Gly Gly Cys Cys Thr Cys Cys Cys Thr Thr Gly Cys Ala Ala  
2945 2950 2955

Cys Thr Cys Ala Gly Ala Gly Cys Thr Gly Cys Thr Gly Cys Ala  
2960 2965 2970

Cys Thr Cys Ala Gly Gly Ala Gly Gly Gly Cys Cys Cys Ala  
2975 2980 2985

Thr Cys Cys Ala Ala Thr Cys Cys Cys Gly Gly Gly Cys Cys Cys  
2990 2995 3000

Cys Thr Gly Cys Ala Gly Gly Gly Ala Ala Ala Ala Gly Cys Gly  
3005 3010 3015

Cys Thr Gly Gly Gly Thr Gly Thr Gly Thr Gly Cys Ala Gly  
3020 3025 3030

Ala Gly Gly Cys Gly Cys Ala Gly Gly Gly Thr Gly Gly Gly Thr  
3035 3040 3045

Gly Gly Gly Gly Cys Thr Gly Cys Cys Ala Gly Cys Cys Ala Gly  
3050 3055 3060

## EX05-004patentin.txt

Gly Ala Cys Cys Cys Thr Gly 3065 Gly Cys Cys Thr Gly 3070 Gly Cys Ala Gly  
 Cys Cys Thr Gly Ala Thr Cys 3080 Cys Ala Ala Ala Cys 3085 Cys Ala Ala  
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 Ala Thr Ala Gly Cys Cys Ala 3140 Gly Gly Thr Cys Thr 3145 Thr Cys Cys  
 Thr Gly Gly Cys Cys Cys Thr 3155 Thr Gly Ala Gly Gly 3160 Cys Thr Gly  
 Gly Gly Cys Thr Gly Gly Cys 3170 Gly Gly Ala Cys Ala Gly Gly Cys  
 Ala Cys Cys Thr Ala Cys Cys 3185 Thr Cys Thr Thr Cys 3190 Cys Thr Thr  
 Ala Ala Gly Cys Thr Gly Ala 3200 Ala Gly Cys Thr Cys 3205 Cys Cys Ala  
 Cys Ala Cys Thr Gly Thr Cys 3215 Thr Thr Cys Cys Ala Gly Gly Gly  
 Cys Thr Gly Ala Gly Ala 3230 Gly Ala Thr Gly Cys 3235 Cys Thr Cys Thr  
 Cys Cys Thr Thr Thr Cys 3245 Thr Ala Cys Thr Gly 3250 Ala Cys Cys  
 Ala Thr Cys Thr Thr Gly Ala 3260 Thr Ala Cys Thr Thr 3265 Ala Thr Thr  
 Thr Ala Thr Ala Cys Gly Ala 3275 Gly Ala Gly Gly Cys 3280 Ala Gly Thr  
 Thr Gly Cys Thr Gly Gly Ala 3290 Cys Gly Gly Gly Gly 3295 Thr Ala Gly  
 Thr Ala Cys Thr Gly Gly Gly 3300 Ala Ala Gly Cys Ala Gly Gly Ala  
 3310 Ala Ala Gly Cys Ala 3315 Gly Gly Ala

## EX05-004patentin.txt

Gly Gly Cys Ala Gly Ala Ala Thr Gly Gly Cys Thr Cys Thr Gly  
3320 3325 3330 3335 3340 3345 3350 3355 3360 3365 3370 3375 3380 3385 3390 3395

Cys Thr Gly Ala Gly Cys Cys Thr Cys Cys Thr Ala Cys Cys Cys  
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Ala Ala Ala Ala Ala

&lt;210&gt; 7

&lt;211&gt; 2052

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 7

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20 25 30

Cys Gly Ala Gly Gly Cys Gly Gly Ala Gly Gly Cys Cys Gly Gly  
35 40 45

Gly Cys Gly Cys Thr Gly Cys Cys Cys Gly Cys Gly Gly Cys Gly  
50 55 60

Cys Cys Cys Gly Cys Ala Thr Gly Gly Ala Cys Thr Gly Gly Ala  
65 70 75 80

Gly Gly Cys Gly Cys Cys Gly Cys Gly Ala Gly Gly Ala Gly Gly  
85 90 95

Cys Gly Gly Cys Gly Gly Cys Gly Cys Ala Gly Cys Cys Gly Gly  
100 105 110

Gly Ala Cys Ala Gly Cys Ala Gly Cys Gly Ala Cys Cys Thr Gly Gly  
115 120 125

Gly Cys Cys Cys Gly Gly Cys Gly Cys Ala Gly Gly Gly Cys Cys  
130 135 140

EX05-004patentin.txt  
Cys Cys Gly Gly Cys Gly Gly Gly Cys Gly Gly Cys Cys Gly Gly  
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165 170 175  
  
Gly Gly Cys Cys Cys Gly Gly Ala Cys Ala Gly Ala Gly Gly Gly  
180 185 190  
  
Thr Cys Cys Ala Gly Cys Cys Thr Cys Cys Ala Cys Ala Gly Cys Gly  
195 200 205  
  
Ala Gly Cys Cys Thr Gly Ala Gly Ala Gly Gly Gly Cys Cys Gly Gly  
210 215 220  
  
Cys Cys Thr Cys Gly Gly Gly Cys Cys Thr Gly Cys Gly Cys Cys Gly  
225 230 235 240  
  
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245 250 255  
  
Ala Gly Gly Cys Ala Gly Ala Ala Thr Thr Cys Thr Gly Gly Ala Cys  
260 265 270  
  
Ala Gly Ala Cys Gly Gly Ala Cys Ala Gly Ala Cys Thr Gly Ala Gly  
275 280 285  
  
Cys Cys Cys Gly Cys Gly Cys Ala Gly Cys Thr Gly Gly Cys Cys  
290 295 300  
  
Thr Thr Gly Gly Ala Gly Thr Ala Gly Ala Gly Ala Cys Cys Gly Ala  
305 310 315 320  
  
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340 345 350  
  
Cys Cys Ala Gly Cys Cys Thr Cys Cys Gly Gly Ala Cys Gly Cys Ala  
355 360 365  
  
Thr Cys Thr Ala Gly Ala Ala Thr Gly Gly Ala Gly Cys Thr Gly Gly  
370 375 380  
  
Thr Cys Ala Gly Ala Gly Cys Thr Gly Gly Ala Gly Ala Cys Gly Ala  
385 390 395 400  
  
Cys Thr Thr Gly Thr Cys Thr Thr Thr Gly Gly Ala Cys Gly Gly Ala  
405 410 415

EX05-004patentin.txt  
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450 455 460  
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465 470 475 480  
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485 490 495  
Ala Gly Cys Cys Ala Gly Gly Gly Thr Thr Cys Ala Thr Gly Gly  
500 505 510  
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515 520 525  
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Ala Gly Ala Cys Thr Cys Ala Gly Cys Cys Ala Gly Ala Gly Ala Gly  
545 550 555 560  
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565 570 575  
Gly Ala Thr Ala Ala Cys Cys Thr Cys Thr Gly Gly Ala Cys Cys Cys  
580 585 590  
Ala Cys Cys Ala Gly Ala Ala Cys Ala Gly Thr Thr Cys Cys Ala Gly  
595 600 605  
Cys Cys Thr Cys Cys Ala Gly Ala Cys Thr Cys Ala Cys Cys Cys Ala  
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cys Ala Ala Ala Ala Gly Ala Gly Cys Cys Ala Ala Gly Thr Gly Cys  
645 650 655  
Thr Gly Ala Thr Gly Gly Cys Thr Cys Cys Thr Gly Gly Ala Ala Ala  
660 665 670  
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675 680 685

EX05-004patentin.txt  
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690 695 700  
Gly Gly Ala Thr Ala Thr Thr Gly Ala Ala Gly Gly Thr Cys Cys Cys  
705 710 715 720  
Thr Gly Gly Ala Cys Ala Gly Ala Gly Cys Cys Ala Thr Ala Thr Ala  
725 730 735  
Cys Thr Gly Ala Thr Gly Gly Cys Thr Cys Cys Cys Ala Gly Ala Ala  
740 745 750  
Ala Ala Ala Ala Cys Ala Gly Gly Ala Thr Ala Cys Thr Gly Ala Ala  
755 760 765  
Gly Cys Ala Gly Cys Cys Ala Gly Gly Ala Ala Ala Cys Ala Gly Cys  
770 775 780  
Cys Thr Gly Gly Cys Ala Cys Thr Gly Gly Thr Gly Gly Thr Thr Thr  
785 790 795 800  
Cys Cys Ala Ala Ala Thr Ala Cys Ala Ala Cys Ala Gly Gly Ala Thr  
805 810 815  
Ala Cys Thr Gly Ala Thr Gly Gly Cys Thr Cys Cys Thr Gly Gly Ala  
820 825 830  
Cys Ala Cys Ala Ala Cys Cys Thr Ala Gly Cys Ala Cys Thr Gly Ala  
835 840 845  
Cys Gly Gly Thr Thr Cys Cys Cys Ala Gly Ala Cys Ala Gly Cys Ala  
850 855 860  
Cys Cys Thr Gly Gly Ala Cys Ala Gly Ala Cys Thr Gly Cys Cys  
865 870 875 880  
Thr Cys Thr Thr Gly Gly Ala Gly Ala Gly Cys Cys Thr Gly Ala  
885 890 895  
Gly Gly Ala Thr Gly Gly Cys Cys Cys Ala Thr Thr Ala Gly Ala Gly  
900 905 910  
Gly Ala Ala Cys Cys Ala Gly Ala Gly Cys Cys Thr Gly Gly Ala Gly  
915 920 925  
Ala Ala Thr Thr Gly Cys Thr Gly Ala Cys Thr Cys Ala Cys Cys Thr  
930 935 940  
Gly Thr Ala Cys Thr Cys Thr Cys Ala Cys Cys Thr Gly Ala Ala Gly  
945 950 955 960

EX05-004patentin.txt

Thr Gly Thr Ala Gly Cys Cys Cys Cys Cys Thr Gly Thr Gly Cys Cys  
 965 970 975

Cys Thr Gly Thr Gly Cys Cys Cys Cys Gly Cys Cys Thr Cys Ala Thr  
 980 985 990

Cys Ala Thr Thr Ala Cys Cys Cys Cys Thr Gly Ala Gly Ala Cys Cys  
 995 1000 1005

Cys Cys Thr Gly Ala Gly Cys Cys Thr Gly Ala Gly Gly Cys Cys  
 1010 1015 1020

Cys Ala Gly Cys Cys Ala Gly Thr Gly Gly Gly Ala Cys Cys Cys  
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Cys Cys Cys Thr Cys Cys Cys Gly Gly Gly Thr Thr Gly Ala Gly  
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Gly Gly Gly Gly Cys Ala Gly Cys Gly Gly Cys Gly Gly Cys  
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Thr Thr Cys Thr Cys Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr  
 1070 1075 1080

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 1085 1090 1095

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 1100 1105 1110

Gly Cys Cys Gly Gly Gly Gly Cys Gly Gly Ala Gly Gly Thr  
 1115 1120 1125

Gly Cys Cys Ala Gly Cys Gly Ala Thr Cys Cys Cys Gly Ala Gly  
 1130 1135 1140

Gly Ala Cys Ala Gly Gly Thr Cys Thr Gly Gly Ala Gly Cys  
 1145 1150 1155

Ala Ala Ala Cys Cys Cys Thr Gly Gly Ala Ala Gly Ala Ala Gly  
 1160 1165 1170

Cys Thr Gly Ala Ala Gly Ala Cys Ala Gly Thr Thr Cys Thr Gly  
 1175 1180 1185

Ala Ala Gly Thr Ala Thr Thr Cys Ala Cys Cys Cys Thr Thr Thr  
 1190 1195 1200

Gly Thr Gly Gly Thr Cys Thr Cys Cys Thr Thr Cys Gly Ala  
 1205 1210 1215

EX05-004patentin.txt

Ala Ala Ala Cys Ala Cys Thr 1220 Ala Cys Cys Cys Thr 1230 Thr Gly Gly  
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 Cys Ala Thr Gly Cys Thr Gly 1250 Gly Gly Ala Ala Cys 1260 Thr Thr Cys  
 Cys Ala Gly Gly Cys Ala Gly 1265 Gly Ala Gly Ala Gly 1275 Gly Ala Thr  
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 Thr Thr Cys Ala Ala Cys Cys 1400 Ala Gly Ala Thr Gly 1410 Gly Ala Ala  
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 Ala Thr Gly Gly Gly Cys Ala 1460 Gly Cys Ala Gly Gly 1470 Ala Cys Cys

EX05-004patentin.txt

Thr Ala Thr Cys Thr Gly Gly 1475 Ala Ala Gly Ala Gly Gly Ala Gly  
 1480 1485

Cys Thr Ala Gly Thr Gly Ala Ala Gly Gly Cys Ala Cys Gly Gly 1490 1495 1500

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Cys Gly Gly Ala Ala Gly Gly 1520 1525 Ala Cys Ala Thr Gly Thr Ala Thr

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Gly Thr Gly Gly Ala Cys Cys 1550 1555 Cys Thr Gly Gly Gly 1560 Gly Cys Cys

Cys Cys Thr Ala Cys Cys Cys 1565 1570 Cys Thr Gly Ala Gly Gly Ala Gly

Cys Ala Thr Gly Cys Cys Cys 1580 1585 Ala Gly Gly Gly Thr Gly Cys Ala

Gly Thr Cys Ala Cys Cys Ala 1595 1600 Ala Gly Cys Cys Cys 1605 Cys Gly Cys

Thr Ala Cys Ala Thr Gly Cys 1610 1615 Ala Gly Thr Gly Gly 1620 Ala Gly Gly

Gly Ala Ala Ala Cys Cys Ala 1625 1630 Thr Gly Ala Gly Cys 1635 Thr Cys Cys

Ala Cys Cys Thr Cys Thr Ala 1640 1645 Cys Cys Cys Thr Gly 1650 Gly Gly Cys

Thr Thr Cys Cys Gly Gly Ala 1655 1660 Thr Cys Gly Ala Gly Gly Gly Cys

Ala Thr Cys Ala Ala Gly Ala 1670 1675 Ala Gly Gly Cys Ala Gly Ala Thr

Gly Gly Gly Ala Cys Cys Thr 1685 1690 Gly Thr Ala Ala Cys 1695 Ala Cys Cys

Ala Ala Cys Thr Thr Cys Ala 1700 1705 Ala Gly Ala Ala Gly Ala Cys Gly

Cys Ala Gly Gly Cys Ala Cys 1715 1720 Thr Gly Gly Ala Gly 1725 Cys Ala Gly

EX05-004patentin.txt

Gly Thr Gly Ala Cys Ala Ala Ala Ala Gly Thr Gly Cys Thr Gly  
 1730 1735 1740

Gly Ala Gly Gly Ala Cys Thr Thr Cys Gly Thr Gly Gly Ala Thr  
 1745 1750 1755

Gly Gly Ala Gly Ala Cys Cys Ala Cys Gly Thr Cys Ala Thr Cys  
 1760 1765 1770

Cys Thr Gly Cys Ala Ala Ala Ala Gly Thr Ala Cys Gly Thr Gly  
 1775 1780 1785

Gly Cys Ala Thr Gly Cys Cys Thr Ala Gly Ala Ala Gly Ala Ala  
 1790 1795 1800

Cys Thr Thr Cys Gly Thr Gly Ala Ala Gly Cys Thr Cys Thr Gly  
 1805 1810 1815

Gly Ala Gly Ala Thr Cys Thr Cys Cys Cys Cys Cys Thr Thr Cys  
 1820 1825 1830

Thr Thr Cys Ala Ala Gly Ala Cys Cys Cys Ala Cys Gly Ala Gly  
 1835 1840 1845

Gly Thr Gly Gly Thr Ala Gly Gly Cys Ala Gly Cys Thr Cys Cys  
 1850 1855 1860

Cys Thr Cys Cys Thr Cys Thr Cys Gly Thr Gly Cys Ala Cys  
 1865 1870 1875

Gly Ala Cys Cys Ala Cys Ala Cys Cys Cys Gly Gly Cys Cys Thr Gly  
 1880 1885 1890

Gly Cys Cys Ala Ala Gly Gly Thr Cys Thr Gly Gly Ala Thr Gly  
 1895 1900 1905

Ala Thr Ala Gly Ala Cys Thr Thr Cys Gly Gly Cys Ala Ala Gly  
 1910 1915 1920

Ala Cys Gly Gly Thr Gly Gly Cys Cys Thr Thr Gly Cys Cys Cys  
 1925 1930 1935

Gly Ala Cys Cys Ala Cys Cys Ala Gly Ala Cys Gly Cys Thr Cys  
 1940 1945 1950

Ala Gly Cys Cys Ala Cys Ala Gly Gly Cys Thr Gly Cys Cys Cys  
 1955 1960 1965

Thr Gly Gly Gly Cys Thr Gly Ala Gly Gly Gly Cys Ala Ala Cys  
 1970 1975 1980

Cys Gly Thr Gly Ala Gly Gly Ala Cys Gly Gly Cys Thr Ala Cys  
1985 1990 1995 EX05-004patentin.txt

Cys Thr Cys Thr Gly Gly Gly Cys Cys Thr Gly Gly Ala Cys  
2000 2005 2010

Ala Ala Cys Ala Thr Gly Ala Thr Cys Thr Gly Cys Cys Thr Cys  
2015 2020 2025

Cys Thr Gly Cys Ala Gly Gly Gly Cys Thr Gly Gly Cys Ala  
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2045 2050

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<212> PRT  
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<400> 8

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Glu Leu Arg Leu Leu Phe Glu Ala Arg Cys Ala Ala Val Ala Ala Ala  
35 40 45

Ala Ala Ala Gly Glu Pro Arg Ala Arg Gly Ala Lys Arg Arg Gly Gly  
50 55 60

Gln Val Pro Asn Gly Leu Pro Arg Ala Pro Pro Ala Pro Val Ile Pro  
65 70 75 80

Gln Leu Thr Val Thr Ala Glu Glu Pro Asp Val Pro Pro Thr Ser Pro  
85 90 95

Gly Pro Pro Glu Arg Glu Arg Asp Cys Leu Pro Ala Ala Gly Ser Ser  
100 105 110

His Leu Gln Gln Pro Arg Arg Leu Ser Thr Ser Ser Val Ser Ser Thr  
115 120 125

Gly Ser Ser Ser Leu Leu Glu Asp Ser Glu Asp Asp Leu Leu Ser Asp  
130 135 140

Ser Glu Ser Arg Ser Arg Gly Asn Val Gln Leu Glu Ala Gly Glu Asp  
145 150 155 160

Val Gly Gln Lys Asn His Trp Gln Lys Ile Arg Thr Met Val Asn Leu  
Page 31

## EX05-004patentin.txt

165

170

175

Pro Val Ile Ser Pro Phe Lys Lys Arg Tyr Ala Trp Val Gln Leu Ala  
180 185 190

Gly His Thr Gly Ser Phe Lys Ala Ala Gly Thr Ser Gly Leu Ile Leu  
195 200 205

Lys Arg Cys Ser Glu Pro Glu Arg Tyr Cys Leu Ala Arg Leu Met Ala  
210 215 220

Asp Ala Leu Arg Gly Cys Val Pro Ala Phe His Gly Val Val Glu Arg  
225 230 235 240

Asp Gly Glu Ser Tyr Leu Gln Leu Gln Asp Leu Leu Asp Gly Phe Asp  
245 250 255

Gly Pro Cys Val Leu Asp Cys Lys Met Gly Val Arg Thr Tyr Leu Glu  
260 265 270

Glu Glu Leu Thr Lys Ala Arg Glu Arg Pro Lys Leu Arg Lys Asp Met  
275 280 285

Tyr Lys Lys Met Leu Ala Val Asp Pro Glu Ala Pro Thr Glu Glu Glu  
290 295 300

His Ala Gln Arg Ala Val Thr Lys Pro Arg Tyr Met Gln Trp Arg Glu  
305 310 315 320

Gly Ile Ser Ser Ser Thr Thr Leu Gly Phe Arg Ile Glu Gly Ile Lys  
325 330 335

Lys Ala Asp Gly Ser Cys Ser Thr Asp Phe Lys Thr Thr Arg Ser Arg  
340 345 350

Glu Gln Val Leu Arg Val Phe Glu Glu Phe Val Gln Gly Asp Glu Glu  
355 360 365

Val Leu Arg Arg Tyr Leu Asn Arg Leu Gln Gln Ile Arg Asp Thr Leu  
370 375 380

Glu Val Ser Glu Phe Phe Arg Arg His Glu Val Ile Gly Ser Ser Leu  
385 390 395 400

Leu Phe Val His Asp His Cys His Arg Ala Gly Val Trp Leu Ile Asp  
405 410 415

Phe Gly Lys Thr Thr Pro Leu Pro Asp Gly Gln Ile Leu Asp His Arg  
420 425 430

Arg Pro Trp Glu Glu Gly Asn Arg Glu Asp Gly Tyr Leu Leu Gly Leu  
Page 32

435

EX05-004patentin.txt  
440 445Asp Asn Leu Ile Gly Ile Leu Ala Ser Leu Ala Glu Arg  
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<211> 946  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 9

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20 25 30Thr Pro Pro Pro Pro Arg Arg Ala Val Leu Ser Pro Gly Ser Val Phe  
35 40 45Ser Pro Gly Arg Gly Ala Ser Phe Leu Phe Pro Pro Ala Glu Ser Leu  
50 55 60Ser Pro Glu Glu Pro Arg Ser Pro Gly Gly Trp Arg Ser Gly Arg Arg  
65 70 75 80Arg Leu Asn Ser Ser Ser Gly Ser Gly Ser Ser Gly Ser Ser  
85 90 95Val Ser Ser Pro Ser Trp Ala Gly Arg Leu Arg Gly Asp Arg Gln Gln  
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115 120 125Arg Lys Leu Arg Ile Leu Gln Arg Glu Leu Gln Asn Val Gln Val Asn  
130 135 140Gln Lys Val Gly Met Phe Glu Ala His Ile Gln Ala Gln Ser Ser Ala  
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165 170 175Pro Cys Pro Phe Arg Ser Ser Ser Gln Pro Pro Gly Arg Val Leu Val  
180 185 190Gln Gly Ala Arg Ser Glu Glu Arg Arg Thr Lys Ser Trp Gly Glu Gln  
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210 215 220

## EX05-004patentin.txt

Leu Cys Ser Ser Gln Val Lys Lys Gly Met Pro Pro Leu Pro Gly Arg  
225 230 235 240

Ala Ala Pro Thr Gly Ser Glu Ala Gln Gly Pro Ser Ala Phe Val Arg  
245 250 255

Met Glu Lys Gly Ile Pro Ala Ser Pro Arg Cys Gly Ser Pro Thr Ala  
260 265 270

Met Glu Ile Asp Lys Arg Gly Ser Pro Thr Pro Gly Thr Arg Ser Cys  
275 280 285

Leu Ala Pro Ser Leu Gly Leu Phe Gly Ala Ser Leu Thr Met Ala Thr  
290 295 300

Glu Val Ala Ala Arg Val Thr Ser Thr Gly Pro His Arg Pro Gln Asp  
305 310 315 320

Leu Ala Leu Thr Glu Pro Ser Gly Arg Ala Arg Glu Leu Glu Asp Leu  
325 330 335

Gln Pro Pro Glu Ala Leu Val Glu Arg Gln Gly Gln Phe Leu Gly Ser  
340 345 350

Glu Thr Ser Pro Ala Pro Glu Arg Gly Gly Pro Arg Asp Gly Glu Pro  
355 360 365

Pro Gly Lys Met Gly Lys Gly Tyr Leu Pro Cys Gly Met Pro Gly Ser  
370 375 380

Gly Glu Pro Glu Val Gly Lys Arg Pro Glu Glu Thr Thr Val Ser Val  
385 390 395 400

Gln Ser Ala Glu Ser Ser Asp Ser Leu Ser Trp Ser Arg Leu Pro Arg  
405 410 415

Ala Leu Ala Ser Val Gly Pro Glu Glu Ala Arg Ser Gly Ala Pro Val  
420 425 430

Gly Gly Gly Arg Trp Gln Leu Ser Asp Arg Val Glu Gly Gly Ser Pro  
435 440 445

Thr Leu Gly Leu Leu Gly Gly Ser Pro Ser Ala Gln Pro Gly Thr Gly  
450 455 460

Asn Val Glu Ala Gly Ile Pro Ser Gly Arg Met Leu Glu Pro Leu Pro  
465 470 475 480

Cys Trp Asp Ala Ala Lys Asp Leu Lys Glu Pro Gln Cys Pro Pro Gly  
485 490 495

## EX05-004patentin.txt

Asp Arg Val Gly Val Gln Pro Gly Asn Ser Arg Val Trp Gln Gly Thr  
500 505 510

Met Glu Lys Ala Gly Leu Ala Trp Thr Arg Gly Thr Gly Val Gln Ser  
515 520 525

Glu Gly Thr Trp Glu Ser Gln Arg Gln Asp Ser Asp Ala Leu Pro Ser  
530 535 540

Pro Glu Leu Leu Pro Gln Asp Gln Asp Lys Pro Phe Leu Arg Lys Ala  
545 550 555 560

Cys Ser Pro Ser Asn Ile Pro Ala Val Ile Ile Thr Asp Met Gly Thr  
565 570 575

Gln Glu Asp Gly Ala Leu Glu Glu Thr Gln Gly Ser Pro Arg Gly Asn  
580 585 590

Leu Pro Leu Arg Lys Leu Ser Ser Ser Ser Ala Ser Ser Thr Gly Phe  
595 600 605

Ser Ser Ser Tyr Glu Asp Ser Glu Glu Asp Ile Ser Ser Asp Pro Glu  
610 615 620

Arg Thr Leu Asp Pro Asn Ser Ala Phe Leu His Thr Leu Asp Gln Gln  
625 630 635 640

Lys Pro Arg Val Ser Lys Ser Trp Arg Lys Ile Lys Asn Met Val His  
645 650 655

Trp Ser Pro Phe Val Met Ser Phe Lys Lys Tyr Pro Trp Ile Gln  
660 665 670

Leu Ala Gly His Ala Gly Ser Phe Lys Ala Ala Ala Asn Gly Arg Ile  
675 680 685

Leu Lys Lys His Cys Glu Ser Glu Gln Arg Cys Leu Asp Arg Leu Met  
690 695 700

Val Asp Val Leu Arg Pro Phe Val Pro Ala Tyr His Gly Asp Val Val  
705 710 715 720

Lys Asp Gly Glu Arg Tyr Asn Gln Met Asp Asp Leu Leu Ala Asp Phe  
725 730 735

Asp Ser Pro Cys Val Met Asp Cys Lys Met Gly Ile Arg Thr Tyr Leu  
740 745 750

Glu Glu Glu Leu Thr Lys Ala Arg Lys Lys Pro Ser Leu Arg Lys Asp  
755 760 765

## EX05-004patentin.txt

Met Tyr Gln Lys Met Ile Glu Val Asp Pro Glu Ala Pro Thr Glu Glu  
770 775 780

Glu Lys Ala Gln Arg Ala Val Thr Lys Pro Arg Tyr Met Gln Trp Arg  
785 790 795 800

Glu Thr Ile Ser Ser Thr Ala Thr Leu Gly Phe Arg Ile Glu Gly Ile  
805 810 815

Lys Lys Glu Asp Gly Thr Val Asn Arg Asp Phe Lys Lys Thr Lys Thr  
820 825 830

Arg Glu Gln Val Thr Glu Ala Phe Arg Glu Phe Thr Lys Gly Asn His  
835 840 845

Asn Ile Leu Ile Ala Tyr Arg Asp Arg Leu Lys Ala Ile Arg Thr Thr  
850 855 860

Leu Glu Val Ser Pro Phe Phe Lys Cys His Glu Val Ile Gly Ser Ser  
865 870 875 880

Leu Leu Phe Ile His Asp Lys Lys Glu Gln Ala Lys Val Trp Met Ile  
885 890 895

Asp Phe Gly Lys Thr Thr Pro Leu Pro Glu Gly Gln Thr Leu Gln His  
900 905 910

Asp Val Pro Trp Gln Glu Gly Asn Arg Glu Asp Gly Tyr Leu Ser Gly  
915 920 925

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930 935 940

Leu Ala  
945

<210> 10  
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Arg Arg Arg Gln Pro Gly Gln Gln Arg Pro Gly Pro Gly Ala Gly Ala  
35 40 45

## EX05-004patentin.txt

Pro Ala Gly Arg Pro Glu Gly Gly Gly Pro Trp Ala Arg Thr Glu Gly  
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Ser Ser Leu His Ser Glu Pro Glu Arg Ala Gly Leu Gly Pro Ala Pro  
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85 90 95

Pro Ala Ala Ala Gly Leu Gly Val Glu Thr Glu Arg Pro Lys Gln Lys  
100 105 110

Thr Glu Pro Asp Arg Ser Ser Leu Arg Thr His Leu Glu Trp Ser Trp  
115 120 125

Ser Glu Leu Glu Thr Thr Cys Leu Trp Thr Glu Thr Gly Thr Asp Gly  
130 135 140

Leu Trp Thr Asp Pro His Arg Ser Asp Leu Gln Phe Gln Pro Glu Glu  
145 150 155 160

Ala Ser Pro Trp Thr Gln Pro Gly Val His Gly Pro Trp Thr Glu Leu  
165 170 175

Glu Thr His Gly Ser Gln Thr Gln Pro Glu Arg Val Lys Ser Trp Ala  
180 185 190

Asp Asn Leu Trp Thr His Gln Asn Ser Ser Ser Leu Gln Thr His Pro  
195 200 205

Glu Gly Ala Cys Pro Ser Lys Glu Pro Ser Ala Asp Gly Ser Trp Lys  
210 215 220

Glu Leu Tyr Thr Asp Gly Ser Arg Thr Gln Gln Asp Ile Glu Gly Pro  
225 230 235 240

Trp Thr Glu Pro Tyr Thr Asp Gly Ser Gln Lys Lys Gln Asp Thr Glu  
245 250 255

Ala Ala Arg Lys Gln Pro Gly Thr Gly Phe Gln Ile Gln Gln Asp  
260 265 270

Thr Asp Gly Ser Trp Thr Gln Pro Ser Thr Asp Gly Ser Gln Thr Ala  
275 280 285

Pro Gly Thr Asp Cys Leu Leu Gly Glu Pro Glu Asp Gly Pro Leu Glu  
290 295 300

Glu Pro Glu Pro Gly Glu Leu Leu Thr His Leu Tyr Ser His Leu Lys  
305 310 315 320

## EX05-004patentin.txt

Cys Ser Pro Leu Cys Pro Val Pro Arg Leu Ile Ile Thr Pro Glu Thr  
325 330 335

Pro Glu Pro Glu Ala Gln Pro Val Gly Pro Pro Ser Arg Val Glu Gly  
340 345 350

Gly Ser Gly Gly Phe Ser Ser Ala Ser Ser Phe Asp Glu Ser Glu Asp  
355 360 365

Asp Val Val Ala Gly Gly Gly Ala Ser Asp Pro Glu Asp Arg Ser  
370 375 380

Gly Ser Lys Pro Trp Lys Lys Leu Lys Thr Val Leu Lys Tyr Ser Pro  
385 390 395 400

Phe Val Val Ser Phe Arg Lys His Tyr Pro Trp Val Gln Leu Ser Gly  
405 410 415

His Ala Gly Asn Phe Gln Ala Gly Glu Asp Gly Arg Ile Leu Lys Arg  
420 425 430

Phe Cys Gln Cys Glu Gln Arg Ser Leu Glu Gln Leu Met Lys Asp Pro  
435 440 445

Leu Arg Pro Phe Val Pro Ala Tyr Tyr Gly Met Val Leu Gln Asp Gly  
450 455 460

Gln Thr Phe Asn Gln Met Glu Asp Leu Leu Ala Asp Phe Glu Gly Pro  
465 470 475 480

Ser Ile Met Asp Cys Lys Met Gly Ser Arg Thr Tyr Leu Glu Glu Glu  
485 490 495

Leu Val Lys Ala Arg Glu Arg Pro Arg Pro Arg Lys Asp Met Tyr Glu  
500 505 510

Lys Met Val Ala Val Asp Pro Gly Ala Pro Thr Pro Glu Glu His Ala  
515 520 525

Gln Gly Ala Val Thr Lys Pro Arg Tyr Met Gln Trp Arg Glu Thr Met  
530 535 540 545

Ser Ser Thr Ser Thr Leu Gly Phe Arg Ile Glu Gly Ile Lys Lys Ala  
545 550 555 560

Asp Gly Thr Cys Asn Thr Asn Phe Lys Lys Thr Gln Ala Leu Glu Gln  
565 570 575

Val Thr Lys Val Leu Glu Asp Phe Val Asp Gly Asp His Val Ile Leu  
580 585 590

## EX05-004patentin.txt

Gln Lys Tyr Val Ala Cys Leu Glu Glu Leu Arg Glu Ala Leu Glu Ile  
595 600 605

Ser Pro Phe Phe Lys Thr His Glu Val Val Gly Ser Ser Leu Leu Phe  
610 615 620

Val His Asp His Thr Gly Leu Ala Lys Val Trp Met Ile Asp Phe Gly  
625 630 635 640

Lys Thr Val Ala Leu Pro Asp His Gln Thr Leu Ser His Arg Leu Pro  
645 650 655

Trp Ala Glu Gly Asn Arg Glu Asp Gly Tyr Leu Trp Gly Leu Asp Asn  
660 665 670

Met Ile Cys Leu Leu Gln Gly Leu Ala Gln Ser  
675 680